

NCDOT Prioritization 3.0 Project Summary

SPOT ID: H111235 Mode: Highway Status: Submitted

US-421

From/Cross Street: Winston-Salem Northern Beltway

Specific Improvement Type: 1 - Widen Existing Roadway

To: Guilford County Line

Project Category: Statewide Mobility

TIP#:

Length: 5.56

No

Cost to NCDOT: \$69,540,000

Description:

Widen to 6 Lane Freeway.

Fully Funded in Draft STIP?

Division(s): Division 9 **County(s):** FORSYTH

MPOS(s)/RPO(s): Winston Salem Urban Area MPO

Project Location



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Statewide Mobility Total Score: 23.72

Quantitative Score		Division Engineer Local Input Points	MPO/RPO Local Input Points
Multimodal + [Freight & Military] (20%) [Travel Time] Benefit/Cost (30%) Congestion (V/C) (30%) Safety (10%) Economic Competitiveness (10%) Totals: Weight: 100% Weighted Score:	15.49 1.00 58.42 21.51 6.48	N/A	N/A

Regional Impact Total Score: 33.79

Quantitative Score		Division Engineer Local Input Points	MPO/RPO Local Input Points
Congestion (V/C) (25%) Safety (10%) [Travel Time] Benefit/Cost (25%) Accessibility / Connectivity (10%) Totals: Weight: 70% Weighted Score	58.42 21.51 1.00 17.85	Percent: 15% Points: 0	Percent: 15% Points: 100

Division Needs Total Score: 14.03

Quantitative Score		Division Engineer Local Input Points	MPO/RPO Local Input Points
Congestion (V/C) (20%) Safety (10%) [Travel Time] Benefit/Cost (20%)	58.42 21.51 1.00	Percent: 25% Points: 0	Percent: 25% Points: 0
Totals: Weight: 50% Weighted Score: 14.03			

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Project Data *

Existing Conditions

Existing Cross-Section: 60 Speed Limit: Length (miles); 5.56 Facility Type: Freeway Full Access Control: Functional Classification: Other Principal Arterial-Other Freeway Rolling Terrain Type: Lane Width: 12 Paved Shoulder Width: 10 Roadway has Curb & Gutter? No Volume (AADT): 47541.42 72400.38 Capacity: Volume/Capacity Ratio: 0.66 93% % Autos: 7% % Trucks: Truck Volume: 3098.23 18.68 Crash Density: 36.4 Crash Severity: 9.46 Critical Crash Rate: Crash Frequency: 0 0 Severity Index: 3 County Tier Designation: Non-Interstate STRAHNET No Route? 21 Average Commuting Time: Existing Median Type (for Divided Cost Estimation): Pavement Condition Rating: 96 Actual Congested Speed: 60.85 Travel Time Index: 0.98

Project Benefits

Project Cross-Section:	6B - 6 Lane Divided (27' Median with Jersey Barrier with Paved Shoulders
Speed Limit:	60
Length (miles):	5.56
Facility Type:	Freeway
Access Control:	Full
Functional Classification:	Other Principal Arterial- Other Freeway
TerrainType:	Rolling
DOT Design Lane Width:	12
DOT Design Paved Shoulder Width:	10
Travel Time Savings for 30 Years (Total):	3091861.14
Travel Time Savings for 30 Years (Autos):	2890367.64
Travel Time Savings for 30 Years (Trucks):	201493.5
Long-Term Employment:	51
% Change in Economy:	7.87E-05
Provides Direct Connection to Transportation Terminal?	No
Does project upgrade how the roadway functions?	No
In CTP or LRTP?	No
CTP/LRTP Name:	
CTP/LRTP Completion Year:	
Submitted by:	Division 9

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^{*} Data reflects calculations which include weighted averages (where applicable) and represent raw output from the Department's SPOT Online tool and associated databases.

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Project Ownership

Division

Division	Percent	Regional Impact	Division Needs
Division 9	100%	0	0
	0%	0	0
	0%	0	0
TOTAL Division Points		0	0

MPO/RPO

MPO/RPO	Percent	Regional Impact	Division Needs
Winston Salem Urban Area MPO	100%	100	0
	0%	0	0
	0%	0	0
TOTAL MPO/RPO Points		100	0

Project Cost and Source

Construction Cost:	\$69,540,000	TIP Unit
Right-of-Way Cost:	\$0	Cost Estimation Tool
Utilities Cost:	\$0	Cost Estimation Tool
Total Project Cost:	\$69,540,000	
Other Funding:	\$0	None
Cost to NCDOT :	\$69,540,000	

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